Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A computerized method of video analysis, the method comprising:

receiving image data for a plurality of video frames depicting a scene that includes at least one of a plurality of background features, wherein (i) each of the video frames comprises a plurality of image regions and (ii) at least one video frame has an object within at least one image region;

providing a plurality of background classifications each corresponding to one of the background features in the scene;

comparing a value associated with the image regions to a background-specific threshold; and

assigning one of the background classifications to at least one of the image regions based at least in part on a location of the object relative to the image regions and the comparison.

2. (Original) The method of claim 1 wherein one of the background classifications is a floor.

3. (Currently Amended) The method of claim 1 wherein the assigning of a background classification to an image region further comprises comparing a value associated with the image region to the background-specific threshold comprises a floor threshold.

4. (Original) The method of claim 1 wherein one of the background classifications is an obstruction.

5. (Currently Amended) The method of claim 1 wherein the assigning of a background classification to an image region further comprises:

comparing a value associated with the image region to a floor background-specific threshold; and

comparing a value associated with the image region to an obstruction threshold.

6. (Original) The method of claim 1 wherein one of the background classifications is a portal.

7. (Original) The method of claim 1 further comprising:

determining for each video frame whether an object has newly appeared in such video frame; and

determining the image regions in which the newly appeared objects are present.

8. (Original) The method of claim 7 wherein the assigning of a background classification to an image region further comprises counting the number of newly appeared objects that first appeared in the image region.

9. (Original) The method of claim 1 further comprising:

determining for each video frame whether an object has newly disappeared in such video frame; and

determining the image regions in which the newly disappeared objects were last present in a previous video frame.

10. (Original) The method of claim 9 wherein the assigning of a background classification to an image region further comprises counting the number of disappeared objects that disappeared from the image region.

11. (Original) The method of claim 1 further comprising determining whether to track the object based at least in part on the background classification assigned to at least one of the image regions of the video frame.

12. (Original) The method of claim 1 wherein the object further comprises a boundary, the method further comprising the step of determining at least one boundary region that includes the boundary of the object.

13. (Original) The method of claim 1 wherein the object further comprises a boundary, the method further comprising the step of determining at least one boundary region that includes at least one of the top, bottom, and side boundaries of the object.

14. (Original) The method of claim 13 further comprising determining whether to track the object based at least in part on the image regions in which the at least one boundary region is included relative to the background classification assigned to at least one of (i) such image regions and (ii) another image region in the video frame.

15. (Original) The method of claim 1 further comprising determining whether to track the object based at least in part on the size of the object.

16. (Original) The method of claim 1 further comprising determining whether to track the object based at least in part on (i) the size of the object and (ii) the image regions in which the object is present relative to the background classification assigned to at least one of (a) such image regions and (b) another image region.

17. (Original) The method of claim 1 further comprising:
    selecting one of the video frames that has an object; and
    determining whether the object appears in one of the other video frames based at least in part on the background classification assigned to one of the image regions.

18. (Original) The method of claim 1 further comprising:
    selecting one of the video frames that has an object; and
    determining whether the object appears in one of the other video frames at one of an earlier and later time based on the background classification assigned to one of the image regions.

19. – 28 (Cancelled)

29. (Currently Amended) A video analysis system comprising:

means for receiving image data for a plurality of video frames depicting a scene that includes at least one of a plurality of background features, wherein (i) each of the video frames comprises a plurality of image regions and (ii) at least one video frame has an object within at least one image region;

means for providing a plurality of background classifications each corresponding to one of the background features in the scene;

means for comparing a value associated with the image regions to a background-specific threshold; and

means for assigning one of the background classifications to at least one of the image regions based at least in part on a location of the object relative to the image regions and the results of the comparison.

30. (Cancelled)